EQUIPMENT LIST "A"

QUANTITY

2 EACH

LEACH

3 EACH

LEACH

I EACH

I EACH

I EACH

4 EACH

42 S.F.

DESCRIPTION

12 IN., I-WAY, 3-SECTION (R.Y.G.) SIGNAL HEAD MAST ARM MOUNT

12 IN., I-WAY, 3-SECTION (R,Y,G.)

PEDESTRIAN PUSHBUTTON AND SIGN

FOUR CHANNEL LOOP DETECTOR AMPLIFIERS

12 IN., I-WAY, 2-SECTION

PEDESTRIAN SIGNAL HEAD

12 IN., 2-WAY, 2-SECTION PEDESTRIAN SIGNAL HEAD

PEDESTAL MOUNT

POLE MOUNT

(DELAY OUTPUT)

I EACH

SHEET ALUMINUM SIGNS

12 IN., I-WAY, 5-SECTION (R, YA.Y, GA, G.)

SIGNAL HEAD SPAN WIRE MOUNT POLYCARBONATE

SIGNAL HEAD SPAN WIRE MOUNT POLYCARBONATE

EIGHT PHASE, FULLY-ACTUATED TRAFFIC SIGNAL CONTROLLER IN A NEMA SIZE '6' BASE MOUNTED SYSTEM READY CABINET

R3-5 SIGN (30 IN. x 36 IN.) -

- | EACH R6-I(R) SIGN (36 IN. x 12 IN.) "ONE WAY"

(FOR INDEPENDENT USE)

(FOR INDEPENDENT USE)

RIO-12 SIGN (30 IN. × 36 IN.)
"LEFT TURN YEILD ON GREEN O "

HORIZONTAL*

SPAN WIRE MOUNT

MAST ARM MOUNT

- I EACH D3-2 SIGN (VARIABLE x 16 IN.) ~

"LANE USE CONTROL - LEFT ONLY"

BACK TO BACK - MAST ARM MOUNT

(ADVANCE STREET NAME PANEL) (DUAL FACE)

ONE PIECE SHIELD ASSEMBLY ON A BLACK BACKGROUND (30 IN. x 51 IN.) POLE MOUNT:

MI-5 SIGN (30 IN. x 24 IN.) "MARYLAND 235"

M6-I SIGN (21 IN. x 15 IN.) "DIRECTIONAL ARROW-

M3-3 SIGN (24 IN. x 12 IN.) * SOUTH*

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

SPEC. SECTION

806

806

CATEGORY

CODE NO.

960022

960020

960015

960048

960049

965001

971017

900000

973023

EQUIPMENT LIST "B"

R. FOLIPMENT	TO	RF	FURNISHED	AND/OR	INSTALL FD	RY	THE	CONTRACTOR
DI EGON MENT	ı Ç	UL.	I WINIAI SUITE	אוט לטווע	יייייייייייייייייייייייייייייייייייייי	(F	1111	CONTINACTOR

SPEC. SECTION	ITEM No.	QUANTITY L.S.	DESCRIPTION MAINTENANCE OF TRAFFIC
104	114245	110 L.F.	FURNISH AND INSTALL 24" WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE (STOP LINE).
205	203030	2 C.Y.	TEST PIT EXCAVATION
801	801004	8 C.Y.	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
804	837001	3 EACH	FURNISH AND INSTALL GROUND ROD - 3/4 IN. DIAMETER × 10 FT. LENGTH
805	800000	430 L.F.	FURNISH AND INSTALL 2 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	805150	65 L.F.	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
805	800000	95 L.F.	FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
805	805160	15 L.F.	FURNISH AND INSTALL I IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
805	831010	I EACH	FURNISH AND INSTALL 250 WATT H.P.S. LAMP LUMINAIRE
807	807205	I EACH	FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT
810	802501	170 L.F.	FURNISH AND INSTALL STRANDED BARE COPPER GROUND WIRE (NO. 6 AWG)
810	861104	335 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED
810	861105	135 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO.14 AWG)
810	861106	158 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 3 CONDUCTOR (NO.14 AWG)
810	861107	115 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
810	861116	70 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)
810	862101	1295 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
811 813	811001 813015	6 EACH 42 S.F.	FURNISH AND INSTALL ELECTRICAL HANDHOLE INSTALL OVERHEAD SIGN
805	805023	30 L.F.	FURNISH AND INSTALL 2" ELECTRICAL CONDUIT - PVC RISER.
814	860220	2 EACH	INSTALL SIGNAL HEADS - MAST ARM MOUNT
814	860015	3 EACH	INSTALL 12 INCH I WAY 3 SECTION (R,Y,G) SIGNAL HEAD SPAN MOUNT POLYCARBONATE
814	860020	1 EACH	INSTALL 12 INCH I WAY 5 SECTION (R,YA,Y,GA,G) SIGNAL HEAD SPAN MOUNT POLYCARBONATE
814	860048	1 EACH	INSTALL 12 INCH 1-WAY 2 SECTION PEDESTRIAN SIGNAL HEAD PEDESTAL MOUNT
815	862102	335 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
816	871117	I EACH	INSTALL EIGHT-PHASE (FULLY ACTUATED) CONTROLLER AND CABINET -
817	065001	1 54011	BASE MOUNT INSTALL PUSHBUTTON AND SIGN
	865201	I EACH	FURNISH AND INSTALL 14 FT. BREAKAWAY PEDESTAL POLE
818	800000	I EACH	WITH T-BASE AND ANCHOR BOLTS FURNISH AND INSTALL 27 FT. STEEL POLE WITH A SINGLE 60 FT. MAST ARM
	800000	L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
Allebandoleran	800000	400 L.F.	FURNISH AND INSTALL ELECTRICAL OPTICOM CABLE - 4 CONDUCTOR (NO.20 AWG)
managa da managa	873001	L.S.	REMOVE EXISTING SIGNAL EQUIPMENT TO BE SALVAGED
818	800000	3 EACH	BACK GUY WOOD POLE FOR TEMPORARY TRAFFIC SIGNAL
810	861108	700 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
805	800000	100 L.F.	FURNISH AND INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
	800000	I EACH	FURNISH AND INSTALL 2" WEATHER HEAD
and a special interest of the	800000	I EACH	FURNISH AND INSTALL 3' WEATHER HEAD
818	866104	I EACH	FURNISH AND INSTALL 20 FT LIGHTING ARM ON SIGNAL STRUCTURE
* —	800000	2 EACH	RELOCATE AND INSTALL OPTICOM DETECTOR (I WILL BE RELOCATED UNDER PHASE 3 OF CONSTRUCTION SEE DRAWING SS-26)
*	800000	L.S.	DELIVERY OF SALVAGED MATERIALS FURNISH AND 40'INSTALL CLASS 2 WOOD POLE WITH BACK GUY\S
distribution	800000	I EACH	
440-Kanismisted + Step	869102	210 L.F.	FURNISH AND INSTALL%'SPAN WIRE.

FOR DAT

F H W A STATE FED. AID SHEET TOTAL SHEETS

SEE TITLE SHEET

EQUIPMENT LIST *C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7941 CONNELLEY DRIVE, HANOVER, MARYLAND 21076.

<u>QUANTITY</u> <u>DESCRIPTION</u>

STEEL MAST ARM POLE WITH 40 FT. MAST ARM STEEL TWIN MAST ARM POLE WITH TWIN 60 FT. AND 50 FT. MAST ARMS

TRAFFIC SIGNAL CONTROLLER AND

CABINET.

NOTES: I. THE CONTRACTOR SHALL NOTIFY THE SHA AT 410-787-7652

AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

2. ALL EQUIPMENT TO BE REMOVED AND NOT LISTED ABOVE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONSTRUCTION DETAILS

- A. INSTALL SPAN WIRE TO EXISTING C & P WOOD POLE, INSTALL 2" RISER FOR LOOP DETECTOR WIRE, BACK GUY\S AS DIRECTED BY THE ENGINEER.
- B. INSTALL 27' STEEL POLE WITH 60' MAST ARM, 20' LIGHTING ARM AND LUMINAIRE, I-3" WEATHER HEAD, I-2" WEATHER HEAD, SPAN WIRE, TRAFFIC SIGNAL HEADS, PEDESTRAIN SIGNAL HEADS, PUSH BUTTON, RELOCATED OPTICOM DETECTOR AND SIGNS AS SHOWN (NOTE 2 3" PVC 90 DEGREE ANGLE BENDS, AND I -2" PVC 90 DEGREE ANGLE BEND). (SPECIAL NOTE: THE CABLE FROM THE MAST ARM SHALL TERMINATE AT THE CONTROLLER CABINET AND EACH CABLE SHALL BE BY SIGNAL HEAD NUMBER. THIS CABLE WILL BE CONNECTED TO THE CONTROLLER UNDER PHASE 2 OF THE TRAFFIC CONTROL PLANS. THE SIGNALS AND SIGNS WILL BE UNCOVERED ALSO DURING PHASE 2 OF THE TRAFFIC CONTROL PLANS, AND WIRED TO THE CONTROLLER.
- C. INSTALL 14' BREAKAWAY PEDESTAL POLE WITH PEDESTRIAN SIGNAL HEADS, AS SHOWN (NOTE: 1-2" PVC, 90 DEGREE ANGLE BEND). COVER PEDESTRIAN SIGNAL HEAD, THE PEDESTRIAN SIGNAL WILL BE UNCOVERED IN PHASE 2 OF THE TRAFFIC CONTROL PLANS.
- D. INSTALL NEMA SIZE '6' CABINET (NOTE: 2-4" AND 2-2" 90 DEGREE ANGLE BENDS AND 1-3" PVC 20 DEGREE ANGLE POWER FEED BEND).
- E. INSTALL I'LIQUID TIGHT FLEXIBLE NON-METALLIC ELECTRICAL CONDUIT (DETECTOR WIRE SLEEVE)
- F. INSTALL HANDHOLE.
- G. INSTALL 2* SCHEDULE 80 ELECTRICAL CONDUIT TRENCHED.
- H. INSTALL 3" SCHEDULE 80 ELECTRICAL CONDUIT SLOTTED.
- I. INSTALL 3" SCHEDULE 80 ELECTRICAL CONDUIT TRENCHED.
- J. INSTALL 4" SCHEDULE 80 ELECTRICAL CONDUIT TRENCHED.
- K. INSTALL 6'x30' LOOP DETECTOR, ENCASED IN 1/2". FLEXIBLE TUBING (3,6,3 TURNS)
- QUADRUPOLE TYPE.
- M. REMOVE AND SALVAGE EXISTING MAST ARM POLES, RELOCATE OPTICOM DETECTORS.
- N. REMOVE EXISTING HANDHOLE.
- O. REMOVE AND SALVAGE EXISTING CABINET.
- P. NOT USED

L. NOT USED.

- O. INSTALL 24 IN. WHITE REMOVABLE PREFORMED PAVEMENT MARKING TAPE (CROSSWALK).
- R. ABANDON EXISTING LOOP DETECTOR.
- S. PROPOSED OVERHEAD SERVICE.
- T. INSTALL SPAN WIRE, SIGNAL HEADS, SIGNS AND OPTICOM DETECTOR (THE DETECTOR IS RELOCATED FROM REMOVED MAST ARM).

PHASE I TEMPORARY TRAFFIC SIGNAL

SS-20

* NON - FEDERIAL AID ITEM	REVISIONS:	APPROVALS:	MDOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety					
RIMMEL, KLEPPER		CHIEF SIGNAL DESIGN SECTION ASST. DISTRICT ENGINEER TRAFFIC CHIEF TRAFFIC ENGINEERING DESIGN DIVISION	DRAWN BY:	DED/SMH DK/DLA/SMH	ERING DESIGN DIVISION LOG MILE # 18023513.13 MD 235 @ EXPLORATION PARK DRIVE SIGNAL PLAN			
CONSULTING ENGINEERS			DES.BY: CHK.BY:	BJH			ST. MARY'S SHEET NO.	
81 MOSHER STREET BALTIMORE, MARYLAND 21217 TELE:(410)728-2900 FAX:(410)728-3160	A Reconstruct Due To New Geometrics. SHA No.: SM7685270	DIRECTOR OFFICE OF TRAFFIC & SAFETY	I	MAY 7, 1999 F.A.P. NO. N.T.S. S.H.A. NO.		3787A-XI-GII	164 OF 241	

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